

Contents

Introduction	15
Feedback.....	15
Downloading the sample files.....	15
Problem resolution	15
The Excel versions that were used to write this book.....	15
Typographical Conventions Used in This Book.....	16
How to use this construction kit	18
Three important rules.....	18
How to best use the incremental sample files.....	18
Session One: Methodology & Functional Specification	21
Lesson 1-1: Understand the Waterfall Model	22
Lesson 1-2: Understand the structure of a functional specification.....	24
Lesson 1-3: The Functional Specification.....	26
Session Two: Create the User Interface	29
Session Objectives	29
Lesson 2-1: Check that your Excel version is up to date	30
Lesson 2-2: Design the user interface.....	32
Lesson 2-3: Apply background colors	34
Lesson 2-4: Apply borders.....	36
Lesson 2-5: Resize rows and columns.....	38
Lesson 2-6: Add test values.....	40
Lesson 2-7: Apply text formatting.....	42
Lesson 2-8: Merge cells	44
Lesson 2-9: Add moon phase symbols	46
Lesson 2-10: Add a company logo	48
Lesson 2-11: Add controls	50
Lesson 2-12: Create a table for non-recurring custom events.....	52
Lesson 2-13: Create a table for recurring custom events.....	54
Lesson 2-14: Package the user interface for review by users	56
Session Three: Make the calendar functional	59
Session Objectives	59
Lesson 3-1: Create placeholders for calendar control settings	60
Lesson 3-2: Define range names for the calendar control settings.....	62
Lesson 3-3: Make the first day of week selector functional	64
Lesson 3-4: Set control cell links	66
Lesson 3-5: Create helper cells to determine the calendar start date.....	68

Lesson 3-6: Create formulas to determine the calendar start date	70
Lesson 3-7: Create formulas to display each date on the calendar	72
Lesson 3-8: Create formulas to display the days of the week	74
Lesson 3-9: Add conditional formatting to the day numbers	76
Lesson 3-10: Add conditional formatting for weekends	78
Lesson 3-11: Add conditional formatting for the moon phases	80
Session Four: Implement fixed events	83
Session Objectives	83
Lesson 4-1: Create a table for fixed events	84
Lesson 4-2: Link the table of fixed events to the calendar	86
Lesson 4-3: Add fixed-date national holidays	88
Lesson 4-4: Find the first named day in a month	90
Lesson 4-5: Calculate dates for common US public holidays	92
Lesson 4-6: Find the last named day in a month	94
Lesson 4-7: Calculate the date for Memorial Day	96
Lesson 4-8: Calculate the date for Easter Sunday	98
Lesson 4-9: Connect Public Holidays to the FixedEvents table	100
Session Five: Implement custom events	103
Session Objectives	103
Lesson 5-1: Link non-recurring custom events to the calendar	104
Lesson 5-2: Prevent two non-recurring custom events from occurring on the same day	106
Lesson 5-3: Set up recurring custom events	108
Lesson 5-4: Link recurring custom events to the calendar	110
Lesson 5-5: Prevent two recurring custom events from occurring on the same day	112
Lesson 5-6: Restrict the length of custom events	114
Session Six: Implement moon phases	117
Session Objectives	117
Lesson 6-1: Create a worksheet for moon phases	118
Lesson 6-2: Calculate the moon's age	120
Lesson 6-3: Calculate the phase of the moon based on the moon's age	122
Lesson 6-4: Link the moon phases to the calendar	124
Session Seven: Finish the user interface	127
Session Objectives	127
Lesson 7-1: Create user-friendly validation messages	128
Lesson 7-2: Hide error warnings and unlock cells	130
Lesson 7-3: Hide settings and apply protection	132
Lesson 7-4: Remove test data and finalize the year planner	134
Appendix A: Skills Covered in the Essential Skills Course	137

Essential skills course outline	138
Appendix B: Skills Covered in the follow-on Expert Skills Course	143
Expert skills course outline	144
Index	151